Amendments to the Claims:

This listing of claims reflects the current status of all claims in the application:

1. (CURRENTLY AMENDED): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said screen means and wound bed;

a vacuum source fluidically communicating with said foam pad;

a gas chromatograph, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, the gas chromatograph interposed between said foam pad and said vacuum source, wherein said gas chromatograph further comprises a photo diode to detect changes in light frequency as unfiltered wound fluid from the wound bed passes the photo diode;

a computer-processing unit comprising a database that stores light frequencies associated with microorganisms; ~~and~~

a software program operable to compare the light frequency detected by the gas chromatograph with the light frequencies stored in the database; and

a collection canister interposed between said foam pad and said gas chromatograph.

2-5. (CANCELLED).

6. (CURRENTLY AMENDED): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said foam pad and wound bed;

a vacuum source fluidically communicating with said foam pad;

a flexible conduit for communicating between said foam pad and said vacuum source;

a collection canister interposed between said foam pad and said vacuum source; ~~and~~

a sensor array, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, interposed between said foam pad and said vacuum

source, wherein said compositional characteristics are indicative of infection within the wound and include a presence of at least one of a bacterium or an antigen, wherein the sensor array comprises regions of nonconducting organic material, and wherein the sensor array further comprises regions of conducting organic material compositionally different than the nonconducting organic material; and

wherein said sensor array is embedded within said foam pad.

7-9. (CANCELED).

10. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 6 further comprising a flexible conduit for communicating between said foam pad and said vacuum source.

11-20. (CANCELLED).

21. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 1, wherein the microorganisms include at least one of a bacterium or an antigen.

22. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 1, further comprising:

a display operable to transmit at least one of an audible or visual notification if the software program identifies a match between the light frequency detected by the gas chromatograph and at least one of the light frequencies stored in the database.

23. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 1, further comprising:

a filtration mechanism, the gas chromatograph interposed between the wound bed and the filtration mechanism.

24. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 1, wherein said gas chromatograph is embedded within said foam pad.

25. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 1, wherein said gas chromatograph is disposed on said drape, such that said gas chromatograph is in contact with said foam pad.

26. (CURRENTLY AMENDED): The negative pressure therapy device of claim [[5]] 1, wherein said gas chromatograph is disposed within said collection canister.

27. (PREVIOUSLY PRESENTED): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said foam pad and wound bed;

a vacuum source fluidically communicating with said foam pad;

a collection canister interposed between said foam pad and said vacuum source;

a flexible conduit for communicating between said foam pad and said vacuum source;

a gas chromatograph, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, the gas chromatograph interposed between said foam pad and said vacuum source, wherein said gas chromatograph further comprises a photo diode to detect changes in light frequency as unfiltered wound fluid from the wound bed passes the photo diode;

a filtration mechanism, the gas chromatograph interposed between the wound bed and the filtration mechanism;

a computer-processing unit comprising a database that stores light frequencies associated with microorganisms, wherein the microorganisms include at least one of a bacterium or an antigen;

a software program operable to compare the light frequency detected by the gas chromatograph with the light frequencies stored in the database; and

a display transmitting at least one of an audible or visual notification if the software program identifies a match between the light frequency detected by the gas chromatograph and at least one of the light frequencies stored in the database.

28. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 27, wherein said gas chromatograph is embedded within said foam pad.

29. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 27, wherein said gas chromatograph is disposed on said drape, such that said gas chromatograph is in contact with said foam pad.

30. (PREVIOUSLY PRESENTED): The negative pressure therapy device of claim 27, wherein said gas chromatograph is disposed within said collection canister.

31. (NEW): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said foam pad and wound bed;

a vacuum source fluidically communicating with said foam pad;

a flexible conduit for communicating between said foam pad and said vacuum source;

a collection canister interposed between said foam pad and said vacuum source;

a sensor array, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, interposed between said foam pad and said vacuum source, wherein said compositional characteristics are indicative of infection within the wound and include a presence of at least one of a bacterium or an antigen, wherein the sensor array comprises regions of nonconducting organic material, and wherein the sensor array further comprises regions of conducting organic material compositionally different than the nonconducting organic material; and

wherein said sensor array is disposed on said drape, such that said sensor array is in contact with said foam pad.

32. (NEW): The negative pressure therapy device of claim 31 further comprising a flexible conduit for communicating between said foam pad and said vacuum source.

33. (NEW): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said foam pad and wound bed;

a vacuum source fluidically communicating with said foam pad;

a flexible conduit for communicating between said foam pad and said vacuum source;

a collection canister interposed between said foam pad and said vacuum source;

a sensor array, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, interposed between said foam pad and said vacuum source, wherein said compositional characteristics are indicative of infection within the wound and include a presence of at least one of a bacterium or an antigen, wherein the sensor array comprises regions of nonconducting organic material, and wherein the sensor array further comprises regions of conducting organic material compositionally different than the nonconducting organic material; and

wherein said sensor array is disposed within said collection canister.

34. (NEW): The negative pressure therapy device of claim 33 further comprising a flexible conduit for communicating between said foam pad and said vacuum source.

35. (NEW): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said screen means and wound bed;

a vacuum source fluidically communicating with said foam pad;

a gas chromatograph, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, the gas chromatograph interposed between said foam pad and said vacuum source, wherein said gas chromatograph further comprises a photo diode to detect changes in light frequency as unfiltered wound fluid from the wound bed passes the photo diode;

a computer-processing unit comprising a database that stores light frequencies associated with microorganisms;

a software program operable to compare the light frequency detected by the gas chromatograph with the light frequencies stored in the database; and

a filtration mechanism, the gas chromatograph interposed between the wound bed and the filtration mechanism.

36. (NEW): The negative pressure therapy device of claim 35, wherein the microorganisms include at least one of a bacterium or an antigen.

37. (NEW): The negative pressure therapy device of claim 35, further comprising:

a display operable to transmit at least one of an audible or visual notification if the software program identifies a match between the light frequency detected by the gas chromatograph and at least one of the light frequencies stored in the database.

38. (NEW): The negative pressure therapy device of claim 35, wherein said gas chromatograph is embedded within said foam pad.

39. (NEW): The negative pressure therapy device of claim 35, wherein said gas chromatograph is disposed on said drape, such that said gas chromatograph is in contact with said foam pad.

40. (NEW): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said screen means and wound bed;

a vacuum source fluidically communicating with said foam pad;

a gas chromatograph, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, the gas chromatograph interposed between said foam pad and said vacuum source, wherein said gas chromatograph further comprises a photo diode to detect changes in light frequency as unfiltered wound fluid from the wound bed passes the photo diode;

a computer-processing unit comprising a database that stores light frequencies associated with microorganisms;

a software program operable to compare the light frequency detected by the gas chromatograph with the light frequencies stored in the database; and

wherein said gas chromatograph is embedded with said foam pad.

41. (NEW): The negative pressure therapy device of claim 40, wherein the microorganisms include at least one of a bacterium or an antigen.

42. (NEW): The negative pressure therapy device of claim 40, further comprising:

a display operable to transmit at least one of an audible or visual notification if the software program identifies a match between the light frequency detected by the gas chromatograph and at least one of the light frequencies stored in the database.

43. (NEW): A negative pressure therapy device, comprising:

a foam pad for placement within a wound bed;

a drape adhered over said screen means and wound bed;

a vacuum source fluidically communicating with said foam pad;

a gas chromatograph, operable to sense compositional characteristics of unfiltered wound fluid from the wound bed, the gas chromatograph interposed between said foam pad and said vacuum source, wherein said gas chromatograph further comprises a photo diode to detect changes in light frequency as unfiltered wound fluid from the wound bed passes the photo diode;

a computer-processing unit comprising a database that stores light frequencies associated with microorganisms;

a software program operable to compare the light frequency detected by the gas chromatograph with the light frequencies stored in the database; and

wherein said gas chromatograph is disposed on said drape, such that said gas chromatograph is in contact with said foam pad.

45. (NEW): The negative pressure therapy device of claim 43, wherein the microorganisms include at least one of a bacterium or an antigen.

46. (NEW): The negative pressure therapy device of claim 43, further comprising:

a display operable to transmit at least one of an audible or visual notification if the software program identifies a match between the light frequency detected by the gas chromatograph and at least one of the light frequencies stored in the database.